

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

**ERICSSON INC. and  
TELEFONAKTIEBOLAGET LM  
ERICSSON,**

**Plaintiffs,**

**v.**

**APPLE INC.,**

**Defendant.**

**Civil Action No. 2:15-cv-287-JRG-RSP**

**JURY TRIAL DEMANDED**

**APPLE INC.'S ANSWER, DEFENSES, AND COUNTERCLAIMS  
TO ERICSSON INC. AND TELEFONAKTIEBOLAGET LM  
ERICSSON'S ORIGINAL COMPLAINT**

Defendant Apple Inc. ("Apple") files this Answer, Affirmative Defenses, and Counterclaims to Plaintiffs Ericsson Inc. and Telefonaktiebolaget LM Ericsson's (collectively, "Ericsson") Original Complaint for Patent Infringement ("Complaint"). Except as expressly admitted below, Apple denies each and every allegation set forth in the Complaint. Any factual allegation admitted below is admitted only as to the specific admitted facts, and not as to any purported conclusions, characterizations, implications, or speculations that might follow from the admitted facts. Apple responds to the numbered paragraphs of the Complaint and prayer for relief as follows:

### **NATURE OF THE ACTION**<sup>1</sup>

1. Apple denies that the asserted patents are essential to either the 2G GSM or 4G LTE standards, and denies that Ericsson exhausted all options to conclude a license on fair, reasonable, and non-discriminatory (FRAND) terms before commencing this action. Apple admits that Ericsson has contractually committed to license on FRAND terms patents purportedly essential to certain cellular standards, that Ericsson made these commitments by submitting undertakings in the form of one or more declarations to the European Telecommunications Standards Institute (ETSI), and that these commitments bind Ericsson to offer FRAND licensing terms and conditions to any party desiring them. Apple further states that Ericsson has breached its commitments to license the asserted patents on FRAND terms and conditions, including because Ericsson has never made any license offer to Apple specific to the patents asserted in this case, notwithstanding Apple's request that Ericsson do so. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 1 of the Complaint, and, therefore, denies them.

2. Apple admits that it took a license in 2008 to certain Ericsson patents that Ericsson claimed to be essential to various industry standards, and that Apple engaged in negotiations with Ericsson over a period of approximately two years in an effort to renew the license, during which Ericsson offered to arbitrate the royalty rate for a global portfolio of Ericsson's patents. Apple further states that it has expressed a willingness to explore an arbitration model that would involve adjudication of the merits (e.g., infringement/non-

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<sup>1</sup> For ease of reference, Apple repeats the headings set forth in the Complaint in order to simplify comparison of the Complaint and this Answer; however, by doing so, Apple makes no admissions regarding the substance of the heading or any other allegations of the Complaint and, in fact, unless otherwise stated, to the extent that a particular heading can be construed as an allegation, Apple specifically denies all such allegations.

infringement, validity/invalidity, enforceability/unenforceability) of particular patents. Ericsson has not agreed to any such model, and instead has proposed processes that would simply assume that Apple needs a license to Ericsson's entire worldwide portfolio without Ericsson actually proving such a claim on the merits. Apple further states that the license negotiations were unsuccessful because Ericsson sought to license on terms that were not FRAND and not consistent with black-letter principles of patent damages law, and therefore that Ericsson did not seek to negotiate in good faith. Apple denies that the patents subject to the proposed license renewal are essential to industry standards, denies that Ericsson offered to renew the license on FRAND terms, and denies the remaining allegations in Paragraph 2 of the Complaint.

3. Apple denies the allegations set forth in Paragraph 3 of the Complaint. Apple further states that it has tried for approximately two years to reach agreement with Ericsson for a FRAND license, but Ericsson has insisted on non-FRAND terms. As one example, Ericsson has attempted to use patents allegedly essential to cellular standards to obtain a royalty on the value arising from the vast amount of non-cellular functionality in Apple's products by demanding royalties for FRAND-encumbered patents—such as its allegedly GSM- and LTE-essential patents—based on a percentage of the value of entire smartphones or tablet computers. Ericsson has made these excessive, non-FRAND demands rather than properly (a) selecting a royalty base that corresponds to (at most) the component that substantially embodies cellular-processing functionality, *i.e.*, the baseband processor chip, and (b) seeking a reasonable rate applied to that royalty base that reflects the actual technical contributions (if any) of Ericsson's patents to the cellular standards, and that would not result in royalty-stacking problems. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments. Moreover, Ericsson has asserted patents as standard-

essential when the patents are not, in fact, essential to cellular standards like GSM and LTE. No royalties at all should be owed for such patents. Finally, at every turn, Ericsson has taken an “all or nothing” approach in which it has insisted that Apple license Ericsson’s full, worldwide portfolio, or license nothing at all. And Ericsson has simply assumed that Apple is using Ericsson patents, as opposed to proving such alleged use by Apple on the merits. Ericsson has *never* offered Apple *any* license terms specific to the patents-in-suit, let alone FRAND license terms.

4. Apple admits that it filed a declaratory judgment action against Ericsson in the U.S. District Court for the Northern District of California on January 12, 2015, seeking declarations of non-infringement (hereafter the “California Action”), but denies that it filed the California Action without notice. Apple admits that the California Action relates to patents not identified in Ericsson’s Complaint, and that the California Action seeks, as an alternative to its request for a declaration of non-infringement, a judicial declaration that sets a FRAND royalty. Apple denies the remaining factual allegations in Paragraph 4 of the Complaint.

5. Apple denies the allegations in Paragraph 5 of the Complaint. Apple further states that Ericsson has admitted that it has declared patents as essential to standards that are not actually essential, and that Ericsson should be prepared to justify its claims that Apple is using Ericsson’s patents as part of its demand for a FRAND royalty. When Ericsson’s patents have been tested in litigation, many have been found not infringed, invalid, or both. No royalty is appropriate for such patents.

6. Apple denies the allegations in Paragraph 6 of the Complaint. Apple further states that Ericsson’s royalty demands are inconsistent with, and substantially exceed, every

license for FRAND-encumbered cellular patents that Apple has ever entered—including Apple’s 2008 license with Ericsson.

7. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7 of the Complaint, and, therefore, denies them.

8. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8 of the Complaint, and, therefore, denies them.

9. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 9 of the Complaint, and, therefore, denies them.

10. Apple denies that the accused Apple products are “beneficiaries of Ericsson’s fundamental technologies,” and also denies the allegations in Paragraph 10 to the extent that they allege that the iPhone infringes any Ericsson intellectual property. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 10 of the Complaint, and, therefore, denies them.

11. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11 of the Complaint, and, therefore, denies them.

12. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 12 of the Complaint, and, therefore, denies them.

13. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 13 of the Complaint, and, therefore, denies them.

14. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 14 of the Complaint, and, therefore, denies them.

15. Apple admits that it is a corporation organized and existing under the laws of California with its principal place of business at 1 Infinite Loop, Cupertino, California 95014.

With respect to the second sentence of Paragraph 15 of the Complaint, Apple admits that it designs, uses, imports into the United States, sells, and/or offers to sell in the United States smartphones and tablet computers that are capable of communicating over 2G, 3G, and/or 4G cellular networks. With respect to the third sentence of Paragraph 15 of the Complaint, Apple admits that it offers for sale other devices that are able to communicate wirelessly. Apple admits the fourth sentence of Paragraph 15 of the Complaint. Apple denies the remaining allegations in Paragraph 15 of the Complaint.

### **JURISDICTION AND VENUE**

16. Apple admits that the Complaint purports to set forth a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code, but denies that Ericsson's claim has merit. Apple admits that this Court has subject matter jurisdiction over patent infringement suits under 28 U.S.C. §§ 1331 and 1338. Apple admits that venue is proper in this District, but denies that venue in this District is convenient or in the interest of justice under 28 U.S.C. § 1404(a).

17. For purposes of this action, Apple admits that the Eastern District of Texas has personal jurisdiction over Apple for certain reasons, but Apple denies that it or its accused products infringe any valid and enforceable claim of the Ericsson Patents-In-Suit. Apple admits that it has sold products and engaged in communications in the State of Texas, has a registered agent in the State of Texas, is registered to do business in the State of Texas, and has been both a plaintiff and defendant in litigation in the State of Texas. Apple lacks sufficient knowledge or information to form a belief as to the truth of the remaining allegations in Paragraph 17 of the Complaint, and, therefore, denies them.

**THE ERICSSON PATENTS**

18. Apple admits that U.S. Patent No. 8,102,805 (the “’805 patent”) is titled “HARQ in Spatial Multiplexing MIMO System,” was issued on January 24, 2012, and lists on its face Bo Göransson, Per Johan Torsner, and Stefan Parkvall as inventors. Apple admits that what appears to be a copy of the ’805 patent is attached as Exhibit 1 to Ericsson’s Complaint. Apple denies that the ’805 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 18 of the Complaint, and, therefore, denies them.

19. Apple admits that U.S. Patent No. 8,331,476 (the “’476 patent”) is titled “Method for Detecting Transmission Mode in a System Using Multiple Antennas,” was issued on December 11, 2012, and lists on its face George Jöngren as inventor. Apple admits that what appears to be a copy of the ’476 patent is attached as Exhibit 2 to Ericsson’s Complaint. Apple denies that the ’476 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 19 of the Complaint, and, therefore, denies them.

20. Apple admits that U.S. Patent No. 6,301,556 (the “’556 patent”) is titled “Reducing Sparseness in Coded Speech Signals,” was issued on October 9, 2001, and lists on its face Roar Hagen, Björn Stig Erik Johansson, Erik Ekudden, and Willem Baastien as inventors. Apple admits that what appears to be a copy of the ’556 patent is attached as Exhibit 3 to Ericsson’s Complaint. Apple denies that the ’556 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 20 of the Complaint, and, therefore, denies them.

21. Apple admits that U.S. Patent No. 8,607,130 (the “’130 patent”) is titled “Computationally Efficient Convolutional Coding With Rate-Matching,” was issued on

December 10, 2013, and lists on its face Jung-Fu Cheng as inventor. Apple admits that what appears to be a copy of the '130 patent is attached as Exhibit 4 to Ericsson's Complaint. Apple denies that the '130 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 21 of the Complaint, and, therefore, denies them.

22. Apple admits that U.S. Patent No. 8,717,996 (the "'996 patent") is titled "Uplink Scrambling During Random Access," was issued on May 6, 2014, and lists on its face Stefan Parkvall, Erik Dahlman, and Tobias Tynderfeldt as inventors. Apple admits that what appears to be a copy of the '996 patent is attached as Exhibit 5 to Ericsson's Complaint. Apple denies that the '996 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 22 of the Complaint, and, therefore, denies them.

23. Apple admits that U.S. Patent No. 8,660,270 (the "'270 patent") is titled "Method and Arrangement in a Telecommunication System," was issued on February 25, 2014, and lists on its face Rolf Blom, Gunnar Mildh, and Karl Norrman as inventors. Apple admits that what appears to be a copy of the '270 patent is attached as Exhibit 6 to Ericsson's Complaint. Apple denies that the '270 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 23 of the Complaint, and, therefore, denies them.

24. Apple admits that U.S. Patent No. 8,837,381 (the "'381 patent") is titled "Using an Uplink Grant as Trigger of First or Second Type of CQI Report," was issued on September 16, 2014, and lists on its face Eva Englund, Pål Frenger, and Stefan Parkvall as inventors. Apple admits that what appears to be a copy of the '381 patent is attached as Exhibit 7 to Ericsson's



Complaint. Apple denies that the '381 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 24 of the Complaint, and, therefore, denies them.

25. Apple admits that U.S. Patent No. 6,058,359 (the "'359 patent") is titled "Speech Coding Including Soft Adaptability Feature," was issued on May 2, 2000, and lists on its face Roar Hagen and Erik Ekudden as inventors. Apple admits that what appears to be a copy of the '359 patent is attached as Exhibit 8 to Ericsson's Complaint. Apple denies that the '359 patent was duly and legally issued. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 25 of the Complaint, and, therefore, denies them.

26. Apple admits that in its Complaint, Ericsson refers to the '805, '476, '556, '130, '996, '270, '381, and '359 patents as the Ericsson Patents-In-Suit, and for consistency Apple will refer to them as such herein.

27. Apple denies that it infringes any valid and enforceable claim of any Ericsson Patent-In-Suit. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in the first and second sentences of Paragraph 27 of the Complaint, and, therefore, denies them. Apple admits that it does not currently have an express license from Ericsson to the Ericsson Patents-in-Suit, but states that, in the event any liability is found, it is entitled to a license on FRAND terms.

28. Apple denies the allegations in Paragraph 28 of the Complaint.

29. Apple denies the allegations in Paragraph 29 of the Complaint.

30. Apple admits that Ericsson purports to accuse Apple products with 2G, 4G, and/or LTE cellular capabilities, including Apple's iPhone and iPad products, of infringement. Apple

admits that certain of its iPhone and iPad products support 2G, 4G, and/or LTE cellular communication, but denies that all such products possess all such capabilities. Apple denies the remaining allegations in Paragraph 30 of the Complaint, including allegations that it infringes any valid and enforceable claim of any Ericsson Patent-In-Suit.

31. Apple admits that it was served on March 2, 2015 with a copy of the Complaint. Apple admits that it has had discussions with Ericsson about Ericsson's overall patent portfolio, but denies that Ericsson discussed the portfolio in good faith, that Ericsson was a willing licensor, and that Ericsson properly put Apple on legal notice of the Ericsson Patents-In-Suit. Apple denies the remaining allegations in Paragraph 31 of the Complaint.

### **GENERAL ALLEGATIONS**

32. Apple denies the allegations in Paragraph 32 of the Complaint.

33. Apple denies that it, infringes any of the Ericsson Patents-In-Suit. Apple admits that it does business in the United States and in this District. Apple further admits that it sold or offered to sell in this District and elsewhere in the United States, and imported into the United States, iPhone and iPad products with cellular capabilities. Ericsson's allegation regarding "other business in this District" is insufficiently specific for Apple to form a belief as to their truth, and Apple, therefore, denies it.

34. Apple denies the allegations in Paragraph 34 of the Complaint.

### **COUNT I**

#### **CLAIM FOR PATENT INFRINGEMENT OF THE '805 PATENT**

35. Apple denies the allegations in Paragraph 35 of the Complaint.

36. Apple denies the allegations in Paragraph 36 of the Complaint.

37. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the

'805 patent. Apple denies that Ericsson's August 21, 2013 communications were sufficient to put Apple on notice of the '805 patent, and denies the remaining allegations in Paragraph 37 of the Complaint.

38. Apple denies the allegations in Paragraph 38 of the Complaint.

39. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '805 patent. Apple denies that Ericsson's August 21, 2013 communications were sufficient to put Apple on notice of the '805 patent, and denies the remaining allegations in Paragraph 39 of the Complaint.

40. Apple denies the allegations in Paragraph 40 of the Complaint.

41. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '805 patent. Apple denies that Ericsson's August 21, 2013 communications were sufficient to put Apple on notice of the '805 patent, and denies the remaining allegations in Paragraph 41 of the Complaint.

42. Apple denies the allegations in Paragraph 42 of the Complaint.

## **COUNT II**

### **CLAIM FOR PATENT INFRINGEMENT OF THE '476 PATENT**

43. Apple denies the allegations in Paragraph 43 of the Complaint.

44. Apple denies the allegations in Paragraph 44 of the Complaint.

45. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '476 patent. Apple denies the remaining allegations in Paragraph 45 of the Complaint.

46. Apple denies the allegations in Paragraph 46 of the Complaint.

47. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '476 patent. Apple denies the remaining allegations in Paragraph 47 of the Complaint.

48. Apple denies the allegations in Paragraph 48 of the Complaint.

49. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '476 patent. Apple denies the remaining allegations in Paragraph 49 of the Complaint.

50. Apple denies the allegations in Paragraph 50 of the Complaint.

### **COUNT III**

#### **CLAIM FOR PATENT INFRINGEMENT OF THE '556 PATENT**

51. Apple denies the allegations in Paragraph 51 of the Complaint.

52. Apple denies the allegations in Paragraph 52 of the Complaint.

53. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, that Ericsson presented the '556 patent to Apple in April 2007, and that in its Complaint Ericsson alleges that Apple infringes the '556 patent. Apple denies the remaining allegations in Paragraph 53 of the Complaint.

54. Apple denies the allegations in Paragraph 54 of the Complaint.

55. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, that Ericsson presented the '556 patent to Apple in April 2007, and that in its Complaint Ericsson alleges that Apple infringes the '556 patent. Apple denies the remaining allegations in Paragraph 55 of the Complaint.

56. Apple denies the allegations in Paragraph 56 of the Complaint.

57. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, that Ericsson presented the '556 patent to Apple in April 2007, and

that in its Complaint Ericsson alleges that Apple infringes the '556 patent. Apple denies the remaining allegations in Paragraph 57 of the Complaint.

58. Apple denies the allegations in Paragraph 58 of the Complaint.

#### **COUNT IV**

##### **CLAIM FOR PATENT INFRINGEMENT OF THE '130 PATENT**

59. Apple denies the allegations in Paragraph 59 of the Complaint.

60. Apple denies the allegations in Paragraph 60 of the Complaint.

61. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '130 patent. Apple denies the remaining allegations in Paragraph 61 of the Complaint.

62. Apple denies the allegations in Paragraph 62 of the Complaint.

63. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '130 patent. Apple denies the remaining allegations in Paragraph 63 of the Complaint.

64. Apple denies the allegations in Paragraph 64 of the Complaint.

65. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '130 patent. Apple denies the remaining allegations in Paragraph 65 of the Complaint.

66. Apple denies the allegations in Paragraph 66 of the Complaint.

#### **COUNT V**

##### **CLAIM FOR INFRINGEMENT OF THE '996 PATENT**

67. Apple denies the allegations in Paragraph 67 of the Complaint.

68. Apple denies the allegations in Paragraph 68 of the Complaint.

69. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '996 patent. Apple denies the remaining allegations in Paragraph 69 of the Complaint.

70. Apple denies the allegations in Paragraph 70 of the Complaint.

71. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '996 patent. Apple denies the remaining allegations in Paragraph 71 of the Complaint.

72. Apple denies the allegations in Paragraph 72 of the Complaint.

73. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '996 patent. Apple denies the remaining allegations in Paragraph 73 of the Complaint.

74. Apple denies the allegations in Paragraph 74 of the Complaint.

## **COUNT VI**

### **CLAIM FOR PATENT INFRINGEMENT OF THE '270 PATENT**

75. Apple denies the allegations in Paragraph 75 of the Complaint.

76. Apple denies the allegations in Paragraph 76 of the Complaint.

77. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '270 patent. Apple denies the remaining allegations in Paragraph 77 of the Complaint.

78. Apple denies the allegations in Paragraph 78 of the Complaint.

79. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '270 patent. Apple denies the remaining allegations in Paragraph 79 of the Complaint.

80. Apple denies the allegations in Paragraph 80 of the Complaint.

81. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '270 patent. Apple denies the remaining allegations in Paragraph 81 of the Complaint.

82. Apple denies the allegations in Paragraph 82 of the Complaint.

## **COUNT VII**

### **CLAIM FOR PATENT INFRINGEMENT OF THE '381 PATENT**

83. Apple denies the allegations in Paragraph 83 of the Complaint.

84. Apple denies the allegations in Paragraph 84 of the Complaint.

85. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '381 patent. Apple denies the remaining allegations in Paragraph 85 of the Complaint.

86. Apple denies the allegations in Paragraph 86 of the Complaint.

87. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '381 patent. Apple denies the remaining allegations in Paragraph 87 of the Complaint.

88. Apple denies the allegations in Paragraph 88 of the Complaint.

89. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, and that in its Complaint Ericsson alleges that Apple infringes the '381 patent. Apple denies the remaining allegations in Paragraph 89 of the Complaint.

90. Apple denies the allegations in Paragraph 90 of the Complaint.

## **COUNT VIII**

### **CLAIM FOR PATENT INFRINGEMENT OF THE '359 PATENT**

91. Apple denies the allegations in Paragraph 91 of the Complaint.

92. Apple denies the allegations in Paragraph 92 of the Complaint.

93. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, that Ericsson presented the '359 patent to Apple in April 2007, and that in its Complaint Ericsson alleges that Apple infringes the '359 patent. Apple denies the remaining allegations in Paragraph 93 of the Complaint.

94. Apple denies the allegations in Paragraph 94 of the Complaint.

95. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, that Ericsson presented the '359 patent to Apple in April 2007, and that in its Complaint Ericsson alleges that Apple infringes the '359 patent. Apple denies the remaining allegations in Paragraph 95 of the Complaint.

96. Apple denies the allegations in Paragraph 96 of the Complaint.

97. Apple admits that it has engaged in discussions with Ericsson regarding Ericsson's patent portfolio, that Ericsson presented the '359 patent to Apple in April 2007, and that in its Complaint Ericsson alleges that Apple infringes the '359 patent. Apple denies the remaining allegations in Paragraph 97 of the Complaint.

98. Apple denies the allegations in Paragraph 98 of the Complaint.

#### **DAMAGES**

99. Apple denies that any of Ericsson's claims have merit and denies that Ericsson is entitled to any damages in this action. Apple denies the remaining allegations in Paragraph 99 of the Complaint.

#### **ATTORNEYS' FEES**

100. Apple denies that any of Ericsson's claims have merit and denies that Ericsson is entitled to any attorneys' fees in this action. Apple denies the remaining allegations in Paragraph 100 of the Complaint.



**DEMAND FOR JURY TRIAL**

In accordance with Fed. R. Civ. P. 38(b), Apple demands a trial by jury on all issues so triable.

**PRAYER FOR RELIEF**

Apple denies that Ericsson is entitled to any relief in this action, as requested or otherwise.

**AFFIRMATIVE DEFENSES**

Apple reserves the right to amend its Answer to add Affirmative Defenses, including allegations of inequitable conduct, consistent with the facts discovered in the case. Subject to that limitation, Apple asserts the following affirmative defenses, without assuming the burden of proof when such burden would otherwise be on Ericsson.

**FIRST AFFIRMATIVE DEFENSE**

**(Failure to State a Claim)**

Ericsson's Complaint fails to state facts sufficient to constitute a claim upon which relief can be granted.

**SECOND AFFIRMATIVE DEFENSE**

**(Invalidity)**

One or more claims of the Ericsson Patents-In-Suit are invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

**THIRD AFFIRMATIVE DEFENSE**

**(Non-infringement)**

Apple has not directly infringed (whether literally or under the doctrine of equivalents), has not induced or contributed to infringement of, does not directly infringe (whether literally or

under the doctrine of equivalents), and does not induce or contribute to infringement of any claim of the Ericsson Patents-in-Suit that may be valid and enforceable.

**FOURTH AFFIRMATIVE DEFENSE**

**(Prosecution History Estoppel)**

Ericsson's claims are barred in whole or in part by prosecution history estoppel.

**FIFTH AFFIRMATIVE DEFENSE**

**(Statutory Limitations on Damages)**

Ericsson's claims for alleged damages or costs are statutorily limited by 35 U.S.C. §§ 286, 287, and 288 and by 28 U.S.C. § 1498.

**SIXTH AFFIRMATIVE DEFENSE**

**(No Equitable Entitlement to Injunctive Relief)**

Ericsson is not entitled to injunctive relief at least because any alleged injury to Ericsson is not immediate or irreparable, and Ericsson has an adequate remedy at law for its claims.

In particular, Ericsson no longer offers for sale or markets cellular handsets in the United States, and therefore does not compete with Apple in sales of the accused products. Moreover, Ericsson has made binding FRAND commitments for each of the Ericsson Patents-In-Suit in which it agreed to accept FRAND royalties for any use of the patents. By making FRAND commitments, patent holders waive such remedies, except in the exceptional circumstances where FRAND royalties are not available. Granting an injunction for a FRAND-committed patent where FRAND royalties are available as a remedy threatens to undermine the pro-competitive benefits of collective standard setting and would harm innovation and consumers.

Accordingly, Ericsson will not be able to demonstrate (1) irreparable injury through an award of FRAND damages if infringement of a valid patent is proven, (2) that FRAND damages

are inadequate remedies, (3) that an equitable remedy is appropriate on balance, and (4) that the public interest would not be disserved by the issuance of an injunction.

**SEVENTH AFFIRMATIVE DEFENSE**

**(Equitable Defenses)**

Ericsson's claims for relief are barred, in whole or in part, under principles of equity including, but not limited to, laches, waiver, estoppel, and/or unclean hands.

**EIGHTH AFFIRMATIVE DEFENSE**

**(Patent Exhaustion and License)**

Ericsson's claims for relief are barred, in whole or in part, as a result of patent exhaustion and/or a license to the Ericsson Patents-In-Suit.

**NINTH AFFIRMATIVE DEFENSE**

**(Contractual Limitation on Damages)**

Ericsson's claims for monetary relief are limited by its obligations to license the Ericsson Patents-In-Suit on fair, reasonable, and non-discriminatory terms.

**TENTH AFFIRMATIVE DEFENSE**

**(Non-Compliance with Licensing Obligation)**

Ericsson's claims for injunctive relief are barred by its failure to comply with its obligation to offer to license the Ericsson Patents-In-Suit on fair, reasonable, and non-discriminatory terms.

**ELEVENTH AFFIRMATIVE DEFENSE**

**(Contractual Bar to Injunctive Relief)**

Ericsson's claims for injunctive relief are barred because Apple is willing to license on FRAND terms any of the Ericsson Patents-In-Suit that is found infringed, valid, and enforceable.

**TWELFTH AFFIRMATIVE DEFENSE**

**(Lack of Standing)**

On information and belief, Ericsson lacks standing to bring this action against Apple because it lacks ownership of the Ericsson Patents-in-Suit and/or has failed to join an indispensable party. Upon information and belief, Plaintiff Ericsson, Inc. is not an owner or assignee of the Patents-in-Suit.

**THIRTEENTH AFFIRMATIVE DEFENSE**

**(Preclusion)**

Ericsson claims for relief are barred under the doctrine of preclusion, including the doctrines of *res judicata* and/or collateral estoppel.

**COUNTERCLAIMS**

Apple incorporates by reference its above responses as if fully set forth herein. In accordance with Rule 13 of the Federal Rules of Civil Procedure, Apple asserts the following counterclaims against Ericsson:

**NATURE OF THE ACTION**

1. This action arises from Ericsson's (1) assertion of patents as "essential" to—or necessary to practice—industry cellular standards such as the 2G Global System for Mobile Communications ("GSM") and 4G "Long Term Evolution" ("LTE") standards, when those patents are in fact not essential, and (2) royalty demands for such patents that exceed both black-letter damages principles and Ericsson's contractual commitments to license the patents on "fair, reasonable, and non-discriminatory" ("FRAND") terms.

2. Apple and Ericsson had a license agreement, which expired on January 14, 2015, that covered many of Ericsson's allegedly standard-essential patents (the "Apple-Ericsson

Agreement”). That agreement was entered into January 2008, soon after Apple introduced the iPhone and two years before Apple introduced the iPad.

3. Since 2008, the iPhone has revolutionized the cellular industry, leading a transformation of cellular devices from simple products used to make and receive phone calls and send and receive basic data messages, into complex computers with countless functionalities and multiple communications capabilities (*e.g.*, Wi-Fi, Bluetooth, near field communications) beyond cellular. The iPad has likewise revived the previously moribund tablet computer segment, leading a surge of development of powerful yet easy-to-use tablets. iPhones and iPads have enjoyed enormous commercial success, based on consumer demand for the many technologies that comprise the unique Apple user experience.

4. As this technological revolution has unfolded in the mobile device industry, courts and regulators have become increasingly vigilant in holding patent holders to their actual inventions—and preventing them from engaging in abusive practices that seek to unduly disrupt competitors’ products or extract excessive patent royalties. Thus, for example, courts and regulators have criticized attempts by traditional cellular companies like Ericsson to assert patents allegedly essential to cellular standards to tax the value arising from the vast amount of non-cellular functionality in modern smartphones and tablet computers. This is particularly important for devices like the iPhone and iPad, whose value derives principally from their non-standardized technologies, such as their industrial design, operating system, and touch interface. Ericsson seeks to exploit its patents to take the value of these cutting-edge Apple innovations, which resulted from years of hard work by Apple engineers and designers and billions of dollars of Apple research and development—and have nothing to do with Ericsson’s patents.

5. This is part of a broader problem in the industry. When Ericsson and other licensors seek excessive royalties from (or, even more threatening, injunctions against) companies that supply products that support cellular standards, it creates harmful disincentives to investing in (a) the standardized functionalities and (b) even more important, the non-cellular, product-differentiating technologies. Companies should not be punished for such investments, yet the licensing practices of Ericsson—which seek to appropriate the value added by non-standardized technologies—would do just that.

6. The law forbids abusive licensing practices. As a matter of black-letter patent law regarding patent valuation, patent royalties must be based on a royalty base that begins with the smallest saleable unit that substantially embodies the patented functionality—and that base may need to be further apportioned to isolate the value of the patented invention. And the royalty rate applied to that base must be reasonable and duly cognizant of other royalties levied by other patent holders on the royalty base—to avoid the problem of an unduly high total “royalty stack.”

7. For patents that companies have declared as “essential” to cellular standards, the black-letter patent law is reinforced by contractual obligations to license such patents on FRAND terms. FRAND royalties must use the proper royalty base and a proper royalty rate. And FRAND royalties must reflect the actual technical contribution of the patented technology to the standard—rather than (a) the value of all the technologies incorporated in an entire standard, (b) the “lock in” value that arises from standardization of technologies—in which technologies gain value simply because companies must use them as part of the standard, and (c) the value of an entire device embracing many technologies beyond the standard.

8. Ericsson has refused to change its long-standing licensing practices to adapt to the current technological and legal environment, and instead demands royalties for FRAND-

encumbered patents—such as its allegedly GSM- and LTE-essential patents—based on a percentage of the value of entire smartphones or tablet computers. Ericsson makes these excessive demands rather than properly (a) selecting a royalty base that corresponds to (at most) the component that substantially embodies cellular-processing functionality, *i.e.*, the baseband processor chip, and (b) seeking a reasonable rate applied to that royalty base, a rate that would not result in royalty-stacking problems.

9. Moreover, Ericsson asserts patents as standard-essential when the patents are not, in fact, essential to cellular standards like LTE. No royalties at all should be owed for such patents.

10. By this Counterclaim, Apple seeks (a) declaratory judgments that the patents that Ericsson has asserted against Apple in this case are not, in fact, essential to GSM or LTE, or infringed by Apple's products that support GSM or LTE; (b) declaratory judgments that the patents that Ericsson has asserted against Apple in this case are invalid and/or unenforceable; or, (c) alternatively, if any of these specific patents are actually valid, enforceable, essential to GSM or LTE, and infringed by Apple, declaratory judgments setting reasonable royalties that (i) use a royalty base of, at most, the component that substantially embodies the alleged invention, and (ii) apply a reasonable royalty rate that avoids royalty-stacking problems.

11. Apple always stands willing to pay true FRAND royalties for valid and essential patents that it is actually using. Indeed, despite the parties' dispute regarding whether Ericsson's allegedly-GSM- or LTE-essential patents are actually essential, Apple proposed renewing the parties' cross-license in accord with current patent law principles governing patent valuation and consistent with the parties' FRAND commitments to their respective declared-essential patents.

### **THE PARTIES**

12. Apple is a California corporation having its principal place of business at 1 Infinite Loop, Cupertino, California 95014.

13. On information and belief, Telefonaktiebolaget LM Ericsson is a Swedish corporation having its corporation headquarters at Torshamnsgatan 23, Kista, 164 83 Stockholm, Sweden. On information and belief, a substantial portion of Telefonaktiebolaget LM Ericsson's business operations relates to enforcement of patents by pursuing licensing demands and litigation against other companies.

14. On information and belief, Ericsson Inc. is a Delaware corporation having a principal place of business at 6300 Legacy Drive, Plano, Texas 75024. On information and belief, Ericsson Inc. is a wholly-owned subsidiary of Ericsson Holding II Inc., a Delaware corporation, which in turn is a wholly-owned subsidiary of Telefonaktiebolaget LM Ericsson.

15. Together, Telefonaktiebolaget LM Ericsson and Ericsson Inc. are referred to herein as "Ericsson."

### **JURISDICTION**

16. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331, 1332,<sup>2</sup> 1338(a), 2201, 2202, and the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

17. This Court has personal jurisdiction over Ericsson because, among other things, Ericsson has availed itself of the Court's jurisdiction by filing the Complaint.

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<sup>2</sup> The amount in controversy—particularly given Ericsson's unfair and unreasonable licensing policies—exceeds the statutory minimum.



## **VENUE**

18. Venue is proper within this district under 28 U.S.C. §§ 1391(b) and (c).

However, venue in this district is not convenient or in the interests of justice under 28 U.S.C. § 1404(a).

## **BACKGROUND**

### **Apple's Products**

19. Apple revolutionized the telecommunications industry in 2007 when it introduced the groundbreaking iPhone, a product that dramatically changed the way people view mobile phones. Reviewers, analysts, and consumers immediately recognized the iPhone as a “game changer.” In one small and lightweight handheld device, the iPhone offered a color multi-touch screen, distinctive user-interface, music storage and playback, a mobile computing platform for handheld applications, and full access to the Internet, as well as typical mobile phone functions, all packaged in an eye-catching design that remains widely acclaimed today.

20. Apple introduced another revolutionary product, the iPad, in 2010. The iPad is an elegantly designed computer tablet with a color touch screen, a user interface reminiscent of the iPhone's user interface, and robust functionality that spans both mobile computing and media storage and playback. Because of its innovative technology and distinctive design, the iPad achieved instant success.

21. Behind the success of Apple's iPhone and iPad products are countless instances of creative achievement, technical innovation, and astute business judgment by Apple employees. In addition to these innovations, Apple's iPhone and iPad products also contain various components and technologies acquired from third-party suppliers that are available to all cellular mobile devices. One such component is the baseband processor used to perform standardized calculations and procedures involved in cellular communication protocols.

22. Apple's products, and in particular the baseband processors within Apple's products, support certain cellular communication protocols incorporated into industry standards. Such standards are formulated and publicly distributed by standard setting organizations ("SSOs"). One such organization is the European Telecommunications Standards Institute ("ETSI"), which helped create the 2G GSM and 4G LTE standards.

#### **ETSI and Ericsson's Contractual FRAND Commitments**

23. ETSI is an independent, non-profit SSO that produces globally-accepted standards for the telecommunications industry. ETSI has more than 750 members from 63 countries across five continents, including Ericsson and Apple. ETSI created or helped to create numerous telecommunication standards, including the 2G GSM, 3G WCDMA/UMTS, and 4G LTE cellular communication standards.

24. Standards are beneficial insofar as they help allow devices made by one company to communicate with devices made by other companies—because these devices can speak the same language. This allows consumers to have confidence that products bought from numerous manufacturers will interoperate with each other.

25. On the other hand, standards can lead to problems when companies claim to hold patents essential to the standards, and use that as leverage to demand excessive royalties from product companies. This is exacerbated by "over-declaration" of patents as essential—many patents that are claimed by their owners to be essential are not, in fact, essential. ETSI has no gatekeeper testing the declarations of essentiality for accuracy. Product suppliers like Apple are faced with claims of infringement of many patents that are actually not essential—and that, even if essential, would not support the excessive demands made by the patent owners. Indeed, Ericsson itself has admitted that it has declared potentially thousands of patents to be essential to cellular standards that are not, in fact, essential. Further, patent "hold-up" occurs "when the

holder of a SEP demands excessive royalties after companies are locked into using a standard.”

*Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1209 ((Fed. Cir. 2014).

26. ETSI has adopted an Intellectual Property Rights (“IPR”) Policy, incorporated as Annex 6 of the ETSI Rules of Procedure. The ETSI IPR Policy requires members to disclose standards-essential and potentially standards-essential patents and patent applications to ETSI and its other members. The IPR Policy further requests that standard-essential patent (“SEP”) owners submit an irrevocable written undertaking that they are prepared to grant irrevocable licenses on FRAND terms and conditions. If a FRAND undertaking is not available, the IPR Policy provides for ETSI to attempt to change the standard to avoid the patent or patent application in question.

27. Ericsson has submitted IPR undertakings to ETSI with regard to each of the patents at issue in this matter. As such, Ericsson is contractually obligated to grant licenses to these patents to Apple on FRAND terms.

### **Ericsson’s Cellular Licensing Position**

28. Ericsson has stated its belief that “[a]ny company using cellular connectivity needs a license to Ericsson’s industry leading patent portfolio comprising 27,000 patents.” Ericsson, Press Release, “Ericsson strengthens focus on IPR licensing” (Jan. 12, 2012) (*available at* <http://www.ericsson.com/news/1576822>) (explaining that the 27,000 patents in its portfolio “cover a wide range of technologies, from wireless access (2G, 3G and 4G) to WLAN and the whole Information and Communications Technology (ICT) value chain”). *See also* “Press Release: Ericsson and ZTE resolve patent license issues,” January 20, 2012 (*available at* <http://www.ericsson.com/news/1579022>) (“any company which sells mobile devices or systems needs a license from Ericsson”).

29. Ericsson has staked out a particularly aggressive licensing posture for the LTE standard—consistently emphasizing royalties based on end product pricing. In April 2008, Ericsson stated that “a reasonable maximum aggregate royalty level for LTE essential IPR in handsets is a single-digit percentage of the sales price.” Ericsson, Press Release “Wireless Industry Leaders commit to framework for LTE technology IPR licensing” (April 14, 2008) (*available at* <http://www.ericsson.com/news/1209031>). Ericsson has further stated that its “licensing arrangements will be made according to Ericsson’s proportional share of the standard IPR that relates to the relevant product category,” (Ericsson, Press Release “Ericsson confirms first LTE license agreements” (June 23, 2009) (*available at* <http://www.ericsson.com/news/1324253>); *see also* Ericsson, Press Release, “Essential Patents and LTE” (September 13, 2012) (*available at* [http://www.ericsson.com/res/thecompany/docs/press/backgrounders/essential\\_patents\\_and\\_lte\\_press\\_backgrounder.pdf](http://www.ericsson.com/res/thecompany/docs/press/backgrounders/essential_patents_and_lte_press_backgrounder.pdf))), and that it “expects to hold 25 percent of all essential patents in LTE.” Ericsson, “LTE In-depth information,” <http://www.ericsson.com/thecompany/press/mediakits/lte/information> (last visited Jan. 12, 2015).

30. In fact, according to the ETSI intellectual property rights database, Ericsson has less than 10% of declared-essential patents for ETSI cellular standards. *See* ETSI, “ETSI IPR Online Database,” <http://ipr.etsi.org>. Moreover, declarations of patent essentiality to ETSI do not mean the declared patents are *actually* essential, as evidenced by Ericsson’s admission that potentially thousands of its declared-essential patents are not, in fact, essential. ETSI does not review essentiality declarations or confirm their accuracy.

31. Nonetheless, according to Ericsson’s publicly professed methodology, it is entitled to 25% of total LTE royalties of a single-digit percentage of end product prices. Ericsson former director of patents and licensing, Eric Stasik, has reported that Ericsson thus expects to seek LTE royalties of 1.5 percent of the price of full devices like handsets. Eric Stasik, “Royalty Rates and Licensing Strategies for Essential Patents on LTE (4G) Telecommunications Standards,” *les Nouvelles*, Sept. 2010 at 115, n.14 (*available at* <http://www.investorvillage.com/uploads/82827/files/LESI-Royalty-Rates.pdf>) (reporting that Ericsson stated that the Ericsson “royalty rate for LTE is therefore expected to be around 1.5 percent for handsets” based on a “maximum aggregate royalty level of 6-8 percent for handsets”).

32. In its public statements, Ericsson has never retreated from the position that it is entitled to an approximate 25 percent share of a total LTE “royalty stack” based on a percentage of the end prices of entire LTE devices—such as full smartphone or full tablet computers. And Ericsson has never accepted that FRAND licensing should begin with a component-focused royalty base, to which a reasonable rate is applied.

33. Taken together with its aggressive approach to litigation, Ericsson’s patent licensing approach, as presented to the Swedish Network for Innovation & Technology Transfer Support, relies on the “implied threat of litigation” to target the “[l]icensee’s sale of infringing products”—in Apple’s case, handsets and tablets—as the “royalty base.” Ericsson, “Licensing,” at 20, 24 (March 12, 2010) (*available at* [http://www.techylib.com/en/view/bottlelewd/ericssons\\_patent\\_activities\\_snitts](http://www.techylib.com/en/view/bottlelewd/ericssons_patent_activities_snitts)). Such practices have drawn the attention of regulators such as the Competition Committee of India, which has investigated Ericsson for its standard-essential patent licensing practices, including, among other

things, basing royalty demands for its declared-essential 2G, 3G and 4G patents on end product—rather than component—prices and limiting potential licensees’ negotiating ability through restrictive Non-Disclosure Agreements. *See In Re: Intex Technologies (India) Ltd. and Telefonaktiebolaget LM Ericsson (Publ)*, Order under Section 26(1) of The Competition Act, 2002, Case No. 76/2013 (Competition Commission of India Jan. 16, 2014) (*available at* <http://www.cci.gov.in/May2011/OrderOfCommission/261/762013.pdf>).

34. Indeed, as recently as a December 2014 presentation at a conference regarding intellectual property, standards, and competition law held in Beijing, China, Ericsson continued to suggest that using the end product as the royalty base—rather than the relevant component within that product—is not a form of patent hold-up.

35. Moreover, Ericsson has made rule-making proposals and policy submissions to standard-setting organizations with the apparent intent of insulating from challenge Ericsson’s licensing practices—including its excessive royalty demands and its improper attempts to use allegedly standard-essential patents to obtain injunctive relief.

36. Ericsson has followed through on the threat of litigation here. Despite having never proposed patent-specific license terms—let alone FRAND terms—for the patents in this action (or any other patents), Ericsson has also asserted the same patents in a companion case before the International Trade Commission. And Ericsson has also asserted *thirty-three* non-essential patents against Apple in this district and in a second case before the International Trade Commission. This too is a form of hold-up, as Ericsson attempts to use those non-essential patents to force Apple to agree to Ericsson’s unfair, unreasonable, and discriminatory demands that Apple take a license to Ericsson’s *entire portfolio* of allegedly essential patents.

**Patents-in-Suit**

37. U.S. Patent No. 8,102,805 (“’805 patent”) is entitled “HARQ in Spatial Multiplexing MIMO System” and bears an issuance date of January 24, 2012. A copy of the ’805 patent is attached as Exhibit 1 to Ericsson’s Complaint.

38. U.S. Patent No. 8,331,476 (“’476 patent”) is entitled “Method for Detecting Transmission Mode in a System Using Multiple Antennas” and bears an issuance date of December 11, 2012. A copy of the ’476 patent is attached as Exhibit 2 to Ericsson’s Complaint.

39. U.S. Patent No. 6,301,556 (“’556 patent”) is entitled “Reducing Sparseness in Coded Speech Signals” and bears an issuance date of October 9, 2001. A copy of the ’556 patent is attached as Exhibit 3 to Ericsson’s Complaint.

40. U.S. Patent No. 8,607,130 (“’130 patent”) is entitled “Computationally Efficient Convolutional Coding With Rate-Matching” and bears an issuance date of December 10, 2013. A copy of the ’130 patent is attached as Exhibit 4 to Ericsson’s Complaint.

41. U.S. Patent No. 8,717,996 (“’996 patent”) is entitled “Uplink Scrambling During Random Access” and bears an issuance date of May 6, 2014. A copy of the ’996 patent is attached as Exhibit 5 to Ericsson’s Complaint.

42. U.S. Patent No. 8,660,270 (“’270 patent”) is entitled “Method and Arrangement in a Telecommunication System” and bears an issuance date of February 25, 2014. A copy of the ’270 patent is attached as Exhibit 6 to Ericsson’s Complaint.

43. U.S. Patent No. 8,837,381 (“’381 patent”) is entitled “Using an Uplink Grant as Trigger of First or Second Type of CQI Report” and bears an issuance date of September 16, 2014. A copy of the ’381 patent is attached as Exhibit 7 to Ericsson’s Complaint.

44. U.S. Patent No. 6,058,359 (“’359 patent”) is entitled “Speech Coding Including Soft Adaptability Feature” and bears an issuance date of May 2, 2000. A copy of the ’359 patent is attached as Exhibit 8 to Ericsson’s Complaint.

45. On information and belief, each of the ’805, ’476, ’556, ’130, ’996, ’270, ’381, and ’359 patents (collectively, the “Ericsson Patents-In-Suit”) is assigned to Telefonaktiebolaget LM Ericsson.

46. None of these patents is essential to GSM or LTE or is infringed by Apple. Moreover, for each of these patents, Ericsson has breached its FRAND commitment by taking the position that it is entitled to device-level royalties rather than setting royalties using a component-focused royalty base and a reasonable rate applied to that base.

### **COUNT I**

#### **(Declaration of Non-Infringement of U.S. Patent No. 8,102,805)**

47. Apple repeats and realleges paragraphs 1-46 of this Counterclaim.

48. The ’805 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the ’805 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple’s products that support GSM or LTE.

49. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the ’805 patent.

50. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the ’805 patent.

51. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the ’805 patent.



**COUNT II**

**(Declaration of Invalidity of U.S. Patent No. 8,102,805)**

52. Apple repeats and realleges paragraph 1-51 of this Counterclaim.

53. None of the asserted claims of the '805 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

54. In Paragraph 28 of its Complaint, Ericsson has alleged that the '805 patent is valid.

55. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '805 patent are valid.

56. Apple is entitled to a judicial determination that the asserted claims of the '805 patent are invalid.

**COUNT III**

**(Declaration of FRAND Royalties for U.S. Patent No. 8,102,805)**

57. Apple repeats and realleges paragraphs 1-56 of this Counterclaim.

58. Ericsson has contractually committed to license the '805 patent on FRAND terms.

59. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based

on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '805 patent.

60. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '805 patent.

61. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

62. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '805 patent.

63. To the extent that the '805 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '805 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '805 patent in this manner.

#### **COUNT IV**

##### **(Declaration of Non-Infringement of U.S. Patent No. 8,331,476)**

64. Apple repeats and realleges paragraphs 1-63 of this Counterclaim.

65. The '476 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '476 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

66. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '476 patent.

67. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '476 patent.

68. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '476 patent.

#### **COUNT V**

##### **(Declaration of Invalidity of U.S. Patent No. 8,331,476)**

69. Apple repeats and realleges paragraph 1-68 of this Counterclaim.

70. None of the asserted claims of the '476 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

71. In Paragraph 28 of its Complaint, Ericsson has alleged that the '476 patent is valid.

72. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '476 patent are valid.

73. Apple is entitled to a judicial determination that the asserted claims of the '476 patent are invalid.

**COUNT VI**

**(Declaration of FRAND Royalties for U.S. Patent No. 8,331,476)**

74. Apple repeats and realleges paragraphs 1-73 of this Counterclaim.

75. Ericsson has contractually committed to license the '476 patent on FRAND terms.

76. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '476 patent.

77. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '476 patent.

78. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

79. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '476 patent.

80. To the extent that the '476 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '476 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '476 patent in this manner.

### **COUNT VII**

#### **(Declaration of Non-Infringement of U.S. Patent No. 6,301,556)**

81. Apple repeats and realleges paragraphs 1-80 of this Counterclaim.

82. The '556 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '556 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

83. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '556 patent.

84. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '556 patent.

85. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '556 patent.

### **COUNT VIII**

#### **(Declaration of Invalidity of U.S. Patent No. 6,301,556)**

86. Apple repeats and realleges paragraph 1-85 of this Counterclaim.

87. None of the asserted claims of the '556 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

88. In Paragraph 28 of its Complaint, Ericsson has alleged that the '556 patent is valid.

89. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '556 patent are valid.

90. Apple is entitled to a judicial determination that the asserted claims of the '556 patent are invalid.

### **COUNT IX**

#### **(Declaration of FRAND Royalties for U.S. Patent No. 6,301,556)**

91. Apple repeats and realleges paragraphs 1-90 of this Counterclaim.

92. Ericsson has contractually committed to license the '556 patent on FRAND terms.

93. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '556 patent.

94. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique

technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '556 patent.

95. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

96. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '556 patent.

97. To the extent that the '556 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '556 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '556 patent in this manner.

### **COUNT X**

#### **(Declaration of Non-Infringement of U.S. Patent No. 8,607,130)**

98. Apple repeats and realleges paragraphs 1-97 of this Counterclaim.

99. The '130 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '130 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

100. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '130 patent.

101. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '130 patent.

102. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '130 patent.

### **COUNT XI**

#### **(Declaration of Invalidity of U.S. Patent No. 8,607,130)**

103. Apple repeats and realleges paragraph 1-102 of this Counterclaim.

104. None of the asserted claims of the '130 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

105. In Paragraph 28 of its Complaint, Ericsson has alleged that the '130 patent is valid.

106. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '130 patent are valid.

107. Apple is entitled to a judicial determination that the asserted claims of the '130 patent are invalid.

### **COUNT XII**

#### **(Declaration of FRAND Royalties for U.S. Patent No. 8,607,130)**

108. Apple repeats and realleges paragraphs 1-107 of this Counterclaim.

109. Ericsson has contractually committed to license the '130 patent on FRAND terms.

110. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers).

The law requires, however, that royalties be set using as the royalty base (at most) the smallest



saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '130 patent.

111. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '130 patent.

112. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

113. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '130 patent.

114. To the extent that the '130 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '130 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '130 patent in this manner.

**COUNT XIII**

**(Declaration of Non-Infringement of U.S. Patent No. 8,717,996)**

115. Apple repeats and realleges paragraphs 1-114 of this Counterclaim.

116. The '996 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '996 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

117. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '996 patent.

118. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '996 patent.

119. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '996 patent.

**COUNT XIV**

**(Declaration of Invalidity of U.S. Patent No. 8,717,996)**

120. Apple repeats and realleges paragraph 1-119 of this Counterclaim.

121. None of the asserted claims of the '996 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

122. In Paragraph 28 of its Complaint, Ericsson has alleged that the '996 patent is valid.

123. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '996 patent are valid.

124. Apple is entitled to a judicial determination that the asserted claims of the '996 patent are invalid.

**COUNT XV**

**(Declaration of FRAND Royalties for U.S. Patent No. 8,717,996)**

125. Apple repeats and realleges paragraphs 1-124 of this Counterclaim.

126. Ericsson has contractually committed to license the '996 patent on FRAND terms.

127. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '996 patent.

128. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '996 patent.

129. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

130. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '996 patent.

131. To the extent that the '996 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '996 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '996 patent in this manner.

#### **COUNT XVI**

##### **(Declaration of Non-Infringement of U.S. Patent No. 8,660,270)**

132. Apple repeats and realleges paragraphs 1-131 of this Counterclaim.

133. The '270 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '270 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

134. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '270 patent.

135. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '270 patent.

136. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '270 patent.

**COUNT XVII**

**(Declaration of Invalidity of U.S. Patent No. 8,660,270)**

137. Apple repeats and realleges paragraph 1-136 of this Counterclaim.

138. None of the asserted claims of the '270 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

139. In Paragraph 28 of its Complaint, Ericsson has alleged that the '270 patent is valid.

140. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '270 patent are valid.

141. Apple is entitled to a judicial determination that the asserted claims of the '270 patent are invalid.

**COUNT XVIII**

**(Declaration of FRAND Royalties for U.S. Patent No. 8,660,270)**

142. Apple repeats and realleges paragraphs 1-141 of this Counterclaim.

143. Ericsson has contractually committed to license the '270 patent on FRAND terms.

144. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '270 patent.

145. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '270 patent.

146. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

147. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '270 patent.

148. To the extent that the '270 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '270 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '270 patent in this manner.

### **COUNT XIX**

#### **(Declaration of Non-Infringement of U.S. Patent No. 8,837,381)**

149. Apple repeats and realleges paragraphs 1-148 of this Counterclaim.

150. The '381 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '381 patent, either literally

or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

151. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '381 patent.

152. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '381 patent.

153. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '381 patent.

### **COUNT XX**

#### **(Declaration of Invalidity of U.S. Patent No. 8,837,381)**

154. Apple repeats and realleges paragraph 1-153 of this Counterclaim.

155. None of the asserted claims of the '381 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

156. In Paragraph 28 of its Complaint, Ericsson has alleged that the '381 patent is valid.

157. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '381 patent are valid.

158. Apple is entitled to a judicial determination that the asserted claims of the '381 patent are invalid.

### **COUNT XXI**

#### **(Declaration of FRAND Royalties for U.S. Patent No. 8,837,381)**

159. Apple repeats and realleges paragraphs 1-158 of this Counterclaim.

160. Ericsson has contractually committed to license the '381 patent on FRAND terms.

161. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '381 patent.

162. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '381 patent.

163. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

164. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '381 patent.

165. To the extent that the '381 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '381 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is



attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '381 patent in this manner.

**COUNT XXII**

**(Declaration of Non-Infringement of U.S. Patent No. 6,058,359)**

166. Apple repeats and realleges paragraphs 1-165 of this Counterclaim.

167. The '359 patent is not essential to the GSM or LTE standards, and Apple has not infringed and does not infringe, directly or indirectly, any claim of the '359 patent, either literally or under the doctrine of equivalents, through the making, using, offering to sell, sale, or import of Apple's products that support GSM or LTE.

168. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether Apple infringes the '359 patent.

169. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '359 patent.

170. Apple is entitled to a judicial declaration that it has not infringed and does not infringe the '359 patent.

**COUNT XXIII**

**(Declaration of Invalidity of U.S. Patent No. 6,058,359)**

171. Apple repeats and realleges paragraph 1-170 of this Counterclaim.

172. None of the asserted claims of the '359 patent is valid because the claims fail to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103, 112, and/or 116.

173. In Paragraph 28 of its Complaint, Ericsson has alleged that the '359 patent is valid.

174. There exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment as to whether the asserted claims of the '359 patent are valid.

175. Apple is entitled to a judicial determination that the asserted claims of the '359 patent are invalid.

#### **COUNT XIV**

##### **(Declaration of FRAND Royalties for U.S. Patent No. 6,058,359)**

176. Apple repeats and realleges paragraphs 1-175 of this Counterclaim.

177. Ericsson has contractually committed to license the '359 patent on FRAND terms.

178. Ericsson has taken the position that royalties for cellular-essential patents should be based on a percentage of the price of entire devices (*e.g.*, smartphones and tablet computers). The law requires, however, that royalties be set using as the royalty base (at most) the smallest saleable unit that substantially embodies the patented technology, and then applying a reasonable royalty rate to that base. For cellular patents, that royalty base would be (at most) the baseband processor chip that performs cellular processing functions. By seeking cellular royalties based on system-level pricing, Ericsson has sought unfair and unreasonable royalties in violation of its FRAND commitments, including for the '359 patent.

179. Ericsson's licensing approach, moreover, discriminates against companies like Apple whose products' pricing is based principally on unique, non-standardized, product-differentiating technologies. Under Ericsson's approach, by incorporating its own unique technologies, Apple is subjecting its products to higher royalty demands than other companies' products that do not incorporate such features and functionalities. This discrimination is also in violation of Ericsson's FRAND commitments, including for the '359 patent.

180. As a result of the acts described in the foregoing paragraphs, there exists a substantial controversy of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

181. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding a royalty for the '359 patent.

182. To the extent that the '359 patent is valid, enforceable, actually essential to GSM or LTE, and infringed by Apple, then Ericsson must (a) select as a royalty base, at most, the smallest saleable unit substantially embodying the '359 patent, and (b) apply to that royalty base a reasonable royalty rate that reflects the actual technical contribution to the standard that is attributable to the patent. As an alternative to its request for a declaration of non-infringement and invalidity, Apple is entitled to a judicial declaration that sets a FRAND royalty for the '359 patent in this manner.

#### **PRAYER FOR RELIEF**

WHEREFORE, Apple prays for relief, as follows:

1. declarations that each of the Ericsson Patents-In-Suit is not essential to the GSM standard and is not infringed by Apple, through the making, using, offering to sell, sale, or import of Apple's products that support GSM;
2. declarations that each of the Ericsson Patents-In-Suit is not essential to the LTE standard and is not infringed by Apple, through the making, using, offering to sell, sale, or import of Apple's products that support LTE;
3. declarations that each of the Ericsson Patents-In-Suit is invalid;
4. as an alternative, for any of the Ericsson Patents-In-Suit found to be actually essential to the GSM or LTE standard, infringed by Apple, and not invalid or unenforceable, a declaration of a FRAND royalty that (a) uses a royalty base of

- (at most) the smallest saleable unit substantially embodying the claimed invention and (b) sets a reasonable rate applied to that royalty base that reflects the actual technical contribution to the standard that is attributable to the patent;
5. a ruling that Ericsson cannot seek injunctive relief or exclusion orders against Apple based on the Ericsson Patents-In-Suit, but rather is limited to (at most) FRAND royalties as described above; and
6. an award of any other remedy or relief to which Apple may be entitled and which is deemed appropriate by the Court.

**JURY DEMAND**

Apple demands a jury trial on all issues and claims so triable.

April 22, 2015

Respectfully submitted,

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***Attorneys for Defendant Apple Inc.***

**CERTIFICATE OF SERVICE**

I hereby certify that on April 22, 2015 a true and correct copy of the foregoing Apple Inc.'s Answer, Defenses, and Counterclaims to Ericsson Inc. and Telefonaktiebolaget LM Ericsson's Original Complaint was served by ECF upon all counsel of record for Ericsson Inc. and Telefonaktiebolaget LM Ericsson.

/s/ Melissa R. Smith  
Melissa R. Smith